

**Notice of Allowability**

Application No.

09/855,798

Applicant(s)

ISHIHARA ET AL.

Examiner

Art Unit

Courtney D. Fields

2137

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 29 August 2005.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>19 October 2005</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                      | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### DETAILED ACTION

1. Claims 1 and 4 have been amended.
2. Claims 1-6 are pending.

### *Response to Arguments*

3. Applicant's arguments filed 29 August 2005 have been fully considered and they are persuasive.

### *Information Disclosure Statement*

4. The Information Disclosure Statement respectfully submitted on 19 October 2005 has been considered by the Examiner.

### *Allowable Subject Matter*

5. Claims **1-6** are allowed.
6. The following is an examiner's statement of reasons for allowance: The present invention is directed towards a chaos cryptographic communication method and system preventing illegal access among a plurality of computers. Each independent claim identifies the uniquely distinct feature "**carrying out the cryptographic communication of information by applying the combination of chaos block encryption and the chaos stream encryption to the information**". The closest prior art, Schneier (Applied Cryptography) discloses a stream cipher in output feedback mode, with the block algorithm acting as a next-state function, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious. The closest prior art, Italia et al. (US Patent No. 6,792,111) discloses a cryptation system for information transmitted through packet switching networks masks the digital information

data by combining it at the transmitting station with digital data of a certain cryptation code before transmitting the so-encrypted data through the network, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious. The closest prior art, Pecora et al. (US Patent No. 5,379,346) discloses a cascading synchronized chaotic system including a nonlinear transmitter having stable first and second subparts, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious. The closest prior art, Gutowitz et al. (US Patent No. 5,365,589) discloses a method and apparatus for encryption, decryption and authentication using dynamical systems, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

7. Claims **1-3** and the respective dependent claims **4-6** are in condition for allowance.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

Art Unit: 2137

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*CDF*

cdf

November 8, 2005

*Matthew D. Smithers*  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*